

WHAT IS CLAIMED IS:

1. A method for shared protection in an Optical Transport Network ring, in which Optical Transport Network there is an ODU layer, having an ODU overhead frame part in which an APS signaling information is present, in the ring ODU working paths and associated ODU protection paths along the opposite side of the ring being present where there is a flow of LP (low Priority) and HP (High Priority) traffic, comprising the following steps:
 - for each working ODU-path there is an associated APS signaling mechanism;
 - an end-to-end APS signaling is used, by the access of the APS signaling information at each node, namely the nodes that terminate the ODU path are allowed to manage the APS signaling protocol and the consequent bridge-and-switch operation for protection;
 - when a failure or a degrade occurs in a ODU working path, the APS signaling protocol is activated on the assigned ODU protection path in the opposite side of the ring;
 - the managed LP traffic on the ODU protection path is squelched, and the relative resource is allocated to recover the HP traffic.
2. A method according to claim 1, wherein an ODU dedicated sub-layer is enabled on the nodes that terminate the ODU-path and on all the nodes belonging to the said ODU protection path in the opposite side of the ring, the said dedicated sub-layer is used to access the said APS signaling information.
3. A method according to claim 2, wherein said ODU dedicated sub-layer is Tandem Connection Monitoring.
4. A method according to claim 1, wherein said access of the APS signaling information at each node is performed by provisioning each node with a table with the APS enable information: for each ODU-path in the node, the table will give the information on whether the APS mechanism concerning that ODU-path must be enabled or not.
5. A method according to claim 1, wherein when a failure or a degrade occurs in an ODU working path, said end-to-end APS signaling is such that a

source routing along the opposite ring side is performed, with the following rule:

- for HP traffic that involves two adjacent nodes of the ring, the APS signaling information is enabled on all the remaining nodes;

- for all the other cases, the APS signaling information is enabled starting
5 from the end-to-end nodes and over all the other nodes of the ring that belong to the protection ring portion.

6. An optical Transport Network ring, wherein it comprises means to perform the method of any of claims 1 to 5.

7. An optical Transport Network node, wherein it comprises means to
10 perform the method of any of claims 1 to 5.